

Report of the Professional Development Committee

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 Pennsylvania Department of Agriculture Bureau of Ride and Measurement Standards
 Harrisburg, Pennsylvania

Reference
 Key Number

400 INTRODUCTION

The Professional Development Committee (hereinafter referred to as "Committee" or PDC) submits its Final Report for consideration by the National Conference on Weights and Measures (NCWM). This report contains the items discussed and actions proposed by the Committee during its Annual Meeting in Pittsburgh, Pennsylvania, July 11 - 14, 2004.

Table A identifies the agenda items in the Report by Reference Key Number, Item Title, and Page Number. The item numbers are those assigned in the Interim Meeting Agenda. A voting item is indicated with a "V" after the item number. An item marked with an "I" after the reference key number is an information item. An item marked with a "D" after the reference key number is a developing issue. The developing designation indicates an item has merit; however, the item was returned to the submitter for further development before any action can be taken at the national level. An item marked with a "W" was withdrawn by the Committee and generally will be referred to the regional weights and measures associations because it either needs additional development, analysis, and input or does not have sufficient Committee support to bring it before the NCWM.

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**Details of All Items
(In Order by Reference Key Number)**

401 EDUCATION

401-1 I National Training Program

Source: NCWM Board of Directors

The NCWM Board of Directors established the Professional Development Committee (PDC) at the 2003 NCWM Annual Meeting in Sparks, Nevada. The first critical charge to the Committee was to represent the NCWM in the development of a national weights and measures professional development program in cooperation with our partners:

- State and local weights and measures departments;
- Private industry at all levels from manufacturer to repair service; and
- Technical advisors from NIST Weights and Measures Division and Measurement Canada

Its scope embraces all matters dealing with, but in priority:

1. The education and professional development of weights and measures officials and the promotion of uniformity and consistency in the application of weights and measures laws and regulations;
2. The education of industry personnel with regard to weights and measures laws and regulations, including all areas from device manufacturer to service technician;
3. Quality standards for weights and measures activities and programs; and
4. Safety awareness for weights and measures-related activities.

Another charge was to develop a firm partnership with the state and local weights and measures departments, private industry at all levels from manufacturer to repair service, and the National Conference on Weights and Measures. It is critical that NIST Weights and Measures Division and Measurement Canada be full partners and that they provide more than technical advisors and support to the PDC.

Background: In 2002 the Professional Development Committee (PDC) (formerly the Committee on Administration and Public Affairs) met with then Chairman Ross Andersen, who explained his vision for revising the National Training Program. Mr. Andersen's vision included a horizontal, hierarchical approach to training, filtering out the common elements of general information applicable to a wide range of devices and including the most detailed information in courses for specific devices. The Committee developed an outline for this new training approach and provided the NCWM membership with its draft at the 88th NCWM Annual Meeting in July 2003.

The PDC strongly supports the decision of the NCWM's efforts to develop a National Training Program that will lead to a National Certification Program for weights and measures officials. We recommend the end product (National Certification Program) be determined first, so the curriculum can be developed to meet the needs of a certification program. To achieve this goal, the PDC must be allowed to do its work for the NCWM and maintain its focus to produce a National Certification Program. At the 2004 Annual Meeting the NCWM voted in support of the development of shorter courses. (see Appendix A)

Discussion: The training responsibility should fall directly on state and local jurisdictions. Administrator training should also be added to the curriculum. The PDC should consider looking outside the NCWM for training and structure.

401-2 I Professional Development

Source: NCWM Board of Directors

Develop a consensus on the necessary and uniform steps in an educational process to raise the professional status of weights and measures and related industry officials throughout the United States.

Discussion: California offered its support and the training material used in that state. The PDC is using materials developed by W&M jurisdictions and private industries. Jurisdictions are encouraged to share training materials with the PDC. The PDC created and distributed an informational survey to collect data to help identify the needs of jurisdictions and to create a consensus position on the uniform steps to follow in the development of a National Training Program.

401-3 I Identify Partners

Source: NCWM Board of Directors

Identify appropriate roles for each of the partners (e.g., NCWM, state and local weights and measures departments, private industry at all levels from manufacturer to repair service, NIST, and Measurement Canada) in implementing an educational process.

Discussion: The development of a training program should follow the steps below:

1. Study training programs of outside agencies, as well as those of state and local jurisdictions.
2. Establish knowledge goals for weights and measures officials and administrators.
3. Develop exams or tests.
4. Develop curriculum based upon the findings and results of the steps 1 - 3 above.

The PDC is in the process of gathering and studying training programs from outside agencies as well as those of state and local jurisdictions. Members and Associate members of the NCWM and some outside agencies have offered their assistance.

401-4 I Create a Curriculum Plan

Source: NCWM Board of Directors

- (a) Develop and maintain a curriculum plan in cooperation with our partners that establishes uniform and consistent training objectives for weights and measures professionals in all fields and at all levels from novice to seasoned veteran.
- (b) The objectives should represent a consensus of our partners and should be organized by scope, sequence, and level of complexity to assist those developing the curriculum materials.

Discussion: The PDC will begin using working groups to develop courses that could be used for both self-study in classroom settings. The initial priority may be high profile devices (e.g., motor fuel dispensers and retail scales). Survey results may alter the Committee's priorities and plans.

401-5 I Curriculum Coordination

Source: NCWM Board of Directors

- (a) Coordinate the development of curriculum materials to be used in the delivery of training (i.e., testing guides, digital presentations, slide shows, lesson plans, etc.) using a variety of formats (e.g., from self-study to traditional instruction).

- (b) Consider creating a network of interested parties to establish priorities, share training resources, foster cooperation to reduce redundancy, and promote uniformity and consistency.

The PDC will use curriculums from other sources in developing an effective National Training Program.

401-6 I Training Innovations

Source: NCWM Board of Directors

Gather and share information from trainers on highly effective techniques, visual aids, etc., that have been used to facilitate learning. The PDC will use as many resources as possible. The Committee reviewed the notes from the NIST sponsored administrators' workshops held in Denver and Baltimore and plans to explore many of these ideas at future meetings.

401-7 I Instructor Improvement

Source: NCWM Board of Directors

Coordinate activities to improve the competence of instructors and the uniformity of delivery of the curriculum. The PDC agrees that an integral part of instructor improvement includes training on effective methods of instruction. The PDC thinks classroom training should be used for preparing instructors to teach others. Outside courses will be considered. To be effective in training assistance the PDC recommends the NCWM should maintain a list of certified trainers.

401-8 I Certification

Source: NCWM Board of Directors

Develop an NCWM certification program based on the curriculum plan with measurable levels of competency.

Discussion: The PDC is exploring certification of weights and measures officials as a means to demonstrate competency. Weights and measure officials must pass written examinations to receive certification. Certificates should be presented at the NCWM Annual Conference to administrators and weights and measures officials who have completed and passed prescribed examinations. Chairman Dennis Ehrhart expressed his support for certification and indicated that NCWM Board of Directors would consider requests to fund training related to this effort.

401-9 I NCWM Training

Source: Western Weights and Measures Association (WWMA)

Recommendation: The WWMA recommended that the NCWM should establish and maintain a database of classroom training programs completed by individual weights and measures officials where the training used NCWM courses (or equivalent) and certified trainers. The NCWM should also issue certificates to individual weights and measures officials for course completion.

Background: The WWMA A&P Committee recognized the value of formal training for inspection staff and the credibility these programs provide. Some jurisdictions have licensing programs for weights and measures inspectors while others rely on informal and less formal programs. The WWMA A&P Committee recognized that NCWM is a logical entity to provide standardized training and accreditation programs.

Discussion: The Professional Development Committee acknowledges the comments from WWMA. They will be taken under advisement during the formulation of this committee. Professional Development Committee members would like to know if NIST will participate in the NCWM training and certification program and would like to see a NIST liaison added to the committee. The PDC would like to maintain NIST involvement with the National Training Program and NIST reported they have and will continue to develop training materials that will be made available for use in a variety of classes. The PDC will also solicit partnerships with other interested parties.

402 PROGRAM MANAGEMENT

402-1 I Voluntary Quality Assurance Assessment

Source: NCWM Board of Directors

The Committee will continue to promote the development of quality programs through the Voluntary Quality Assurance Assessments (VQAA). The Committee would like to see more participation in the VQAA. The Committee discussed the use of the ISO/IEC/EN 17025 "*General Requirements for the Competence of Calibration and Testing Laboratories*" for state and local field enforcement programs. The Committee concluded that the ISO 17025 standard does not apply to state and local field enforcement programs and recommends that the National Conference on Weights and Measures develop its own certification standards for state and local field enforcement programs. The PDC encourages all member states to utilize the VQAA and provide information to the PDC. The assessments can be a valuable tool in determining training needs. The PDC noted that in 2003 several certificates were presented at the annual meeting but that no requests for review were received in 2004. The PDC would like to remind the membership that the VQAA forms and other information are available on the NCWM web site and that the results are confidential.

402-2 I NCWM Associate Membership Scholarships

Source: NCWM Board of Directors

If funding is available, oversee a system to evaluate applications and award scholarships. Provide a report on the scholarships awarded each year. No funds were made available for scholarships for the calendar year 2003. Continued interest in scholarships has been expressed by state and local jurisdictions. Guidelines for the Associate Membership Scholarships can be found in NIST Special Publication 992 of 2003, "Report of the 87th National Conference on Weights and Measures."

402-3 I Safety Awareness

Source: NCWM Board of Directors

Continue work to identify safety issues in the weights and measure field. Coordinate activities to increase safety awareness.

Recommendation: This is an area where activities should be increased to promote safety awareness.

Discussion: Chairman Dennis Ehrhart explained that the Voluntary Quality Assurance Assessment program, the NCWM Associate Membership Scholarships, and Safety Awareness efforts were carryover items from the Committee on Administration and Public Affairs but recommended that the PDC make training its highest priority.

The PDC continues to encourage jurisdictions to send their safety reports and issues to their regional Safety liaison, who in turn sends reports to Charles Gardner, the NCWM Safety Coordinator. The PDC would like to see safety reports published in the NCWM newsletter. Two safety reports were received from the Central Region.

Kenneth Deitzler, Pennsylvania, Chairman

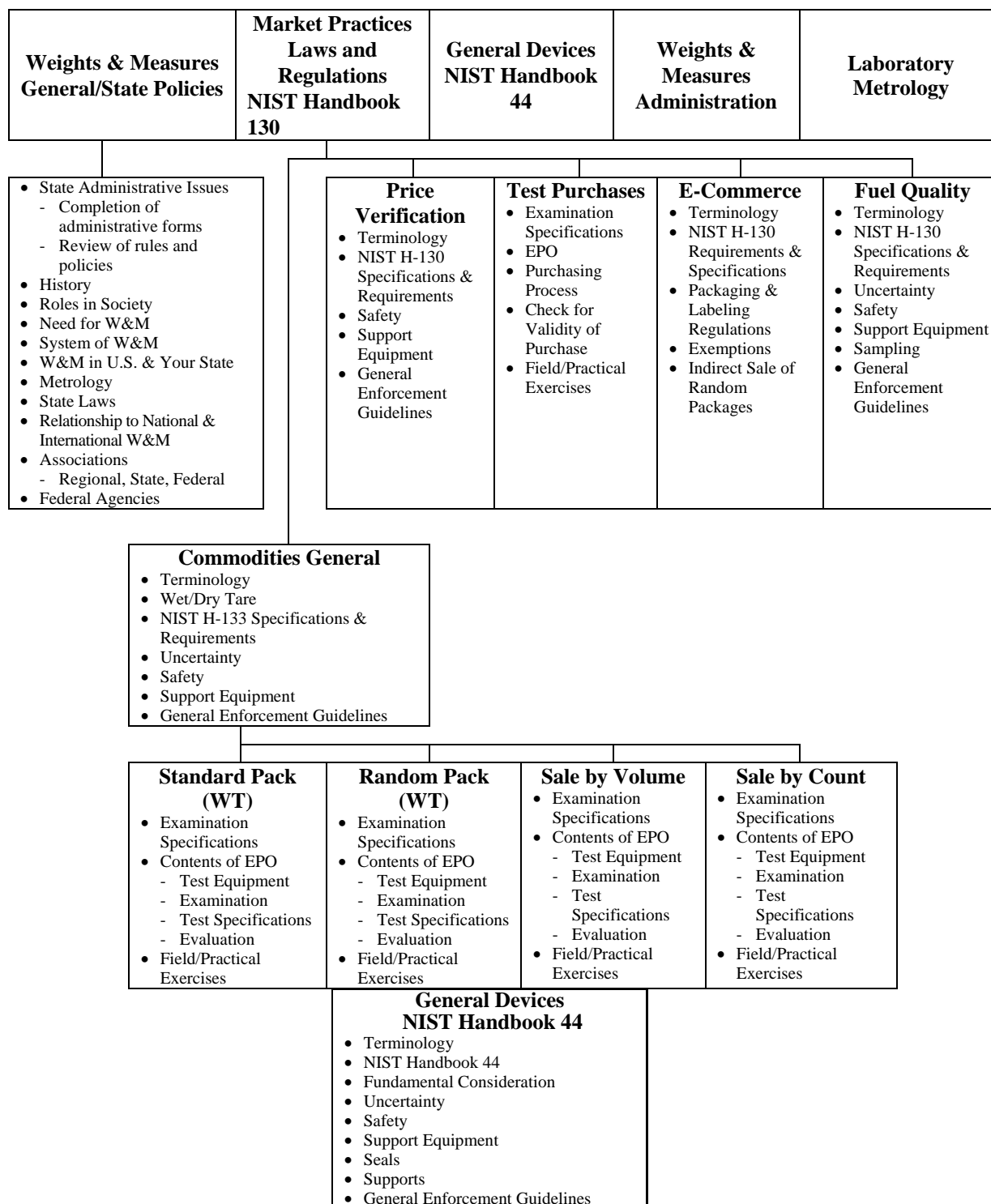
Celeste Bennett, Michigan
Jerry Buendel, Washington
Steve Hadder, Florida
Agatha Shields, Franklin County, Ohio
Stuart Strnad, Texas

C. Gardner, Suffolk County, New York, Safety Liaison
John Moore, Lore Consulting, Associate Membership Committee Representative

Professional Development Committee

Appendix A

National Training Curriculum Outline



Weighing Devices <ul style="list-style-type: none">• Terminology• Scale Types• Technology• Suitability• User Requirements• Operation/Markings• Scale Classes & Tolerances• Basic Scale Test Procedures• Basic Inspection		Measuring Devices <ul style="list-style-type: none">• Terminology• Measuring Device Types• Technology• Suitability• User Requirements• Operation & Markings• Tolerances for LMDs• Basic LMD Test• Basic LMD Inspections		Other Devices <ul style="list-style-type: none">• Terminology• Other Device Types• Technology• Suitability• User Requirements• Operation & Markings• Tolerances for LMDs• Basic Test• Basic Inspections			
Retail Computing Scales <ul style="list-style-type: none">• Common traits• Examination Specifications• Test Equipment• Examination, Installation, & Maintenance• Test Specifications• Evaluation• Field/Practical Exercises		Platform Scales <ul style="list-style-type: none">• Common traits• EPO<ul style="list-style-type: none">- Examination Specifications- User Requirements- Suitability- Test Equipment• Examination, Installation, & Maintenance<ul style="list-style-type: none">- Test Specifications- Evaluation• Field/Practical Exercises		Vehicle Scales <ul style="list-style-type: none">• Common traits• Contents of EPO<ul style="list-style-type: none">- Examination Specifications- User Requirements- Suitability- Test Equipment• Examination, Installation, & Maintenance<ul style="list-style-type: none">- Test Specifications- Evaluation• Field/Practical Exercises Vehicle Scales Advanced <ul style="list-style-type: none">• Initial Verification.			
		Railroad Track <ul style="list-style-type: none">• Common traits• Contents of EPO<ul style="list-style-type: none">- Examination Specifications- User Requirements- Suitability- Test Equipment- Examination, Installation, & Maintenance- Test Specifications- Evaluation• Field/Practical Exercises		Hopper <ul style="list-style-type: none">• Common traits• Contents of EPO<ul style="list-style-type: none">- Examination Specifications- User Requirements- Suitability- Test Equipment- Examination, Installation, & Maintenance- Test Specifications- Evaluation• Field/Practical Exercises			
				<table><tr><td>Point-of-Sale Scales<ul style="list-style-type: none">• Common traits• Examination Specifications• User Requirements• Suitability• Test Equipment• Examination, Installation, & Maintenance• Test Specifications• Evaluation• Field/Practical Exercises</td><td>Precision Scales Class I/II<ul style="list-style-type: none">• Common traits• Examination Specifications• User Requirements• Suitability• Test Equipment• Examination, Installation, & Maintenance• Test Specifications• Evaluation• Field/Practical Exercises</td></tr></table>		Point-of-Sale Scales <ul style="list-style-type: none">• Common traits• Examination Specifications• User Requirements• Suitability• Test Equipment• Examination, Installation, & Maintenance• Test Specifications• Evaluation• Field/Practical Exercises	Precision Scales Class I/II <ul style="list-style-type: none">• Common traits• Examination Specifications• User Requirements• Suitability• Test Equipment• Examination, Installation, & Maintenance• Test Specifications• Evaluation• Field/Practical Exercises
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